

**What is claimed is:**

1. A method of driving a plasma display panel, comprising the steps of:
  - 5       selecting an operation mode on a basis of a motion extent of a data; and  
          controlling at least one of a sub-field arrangement arranged within one frame interval and the number of sustaining pulses differently in response to said selected  
10      operation mode.
2. The method as claimed in claim 1, further comprising the step of:
  - 15       receiving at least one of a signal from a remote controller for remotely controlling the plasma display panel, a cable signal connected to a different media and a signal from a mode selection switch provided separately at the plasma display panel.
- 20 3. The method as claimed in claim 1, wherein said step of selecting the operation mode includes:
  - determining said operation mode in response to said received signal.
- 25 4. The method as claimed in claim 1, wherein said step of selecting the operation mode includes:
  - comparing said data between frames to calculate a variation amount and then comparing said variation amount with a desired reference value, thereby selecting said  
30      operation mode.
5. The method as claimed in claim 1, wherein said sub-field arrangement includes:

at least one selective writing sub-field for selecting on-cells in an address period; and

at least one selective erasing sub-field for selecting off-cells in the address period.

5

6. The method as claimed in claim 5, wherein said step of differently controlling at least one of said sub-field arrangement and the number of sustaining pulses includes:

10 if said operation mode is an AV mode in which a motion extent of said data is large, then allowing the number of selective erasing sub-fields to be larger than the number of selective writing sub-fields.

15 7. The method as claimed in claim 5, wherein said step of differently controlling at least one of said sub-field arrangement and the number of sustaining pulses includes:

20 if said operation mode is a PC mode in which a motion extent of said data is small, then allowing the number of selective writing sub-fields to be larger than the number of selective erasing sub-fields.

8. The method as claimed in claim 1, wherein said step of differently controlling at least one of said sub-field arrangement and the number of sustaining pulses includes:

25 if said operation mode is an AV mode in which a motion extent of said data is large, then selecting a first sub-field arrangement in which sub-fields are arranged to have a small contour noise at a moving picture; and

30 if said operation mode is a PC mode in which a motion extent of said data is small, then selecting a second sub-field arrangement in which sub-fields are arranged to have a wider gray level expression range than the first sub-

field arrangement.

9. The method as claimed in claim 1, wherein said step of differently controlling at least one of said sub-field  
5 arrangement and the number of sustaining pulses includes:

if said operation mode is a PC mode in which a motion extent of said data is small, then controlling the number of sustaining pulses to be smaller than the number of sustaining pulses set in correspondence with an AV mode in  
10 which a motion extent of said data is large.

10. The method as claimed in claim 1, wherein said step of differently controlling at least one of said sub-field arrangement and the number of sustaining pulses includes:

15 if said operation mode is a PC mode in which a motion extent of said data is small, then reducing the number of sustaining pulses such that said data can be displayed at an average brightness falling in 50% through 80% with respect to an average brightness of said data displayed on  
20 the plasma display panel in an AV mode in which a motion extent of said data is large.

11. A driving apparatus for a plasma display panel, comprising:

25 a mode selector for selecting an operation mode on a basis of a motion extent of a data; and

a controller for controlling at least one of a sub-field arrangement arranged within one frame interval and the number of sustaining pulses differently in response to  
30 said selected operation mode.

12. The driving apparatus as claimed in claim 11, wherein said mode selector receives at least one of a signal from

a remote controller for remotely controlling the plasma display panel, a cable signal connected to a different media and a signal from a mode selection switch provided separately at the plasma display panel, and determines  
5 said operation mode in response to said received signal.

13. The driving apparatus as claimed in claim 11, wherein said mode selector compares said data between frames to calculate a variation amount and then compares said  
10 variation amount with a desired reference value, thereby selecting said operation mode.

14. The driving apparatus as claimed in claim 11, wherein said controller arranges at least one selective writing  
15 sub-field for selecting on-cells in an address period and at least one selective erasing sub-field for selecting off-cells in the address period within said one frame interval; and, if said operation mode selected by the mode selector is an AV mode in which a motion extent of said  
20 data is large, allows the number of selective erasing sub-fields to be larger than the number of selective writing sub-fields.

15. The driving apparatus as claimed in claim 11, wherein said controller arranges at least one selective writing  
25 sub-field for selecting on-cells in an address period and at least one selective erasing sub-field for selecting off-cells in the address period within said one frame interval; and, if said operation mode selected by the mode selector is an PC mode in which a motion extent of said  
30 data is small, allows the number of selective writing sub-fields to be larger than the number of selective erasing sub-fields.

16. The driving apparatus as claimed in claim 11, wherein,  
if said operation mode selected by the mode selector is an  
AV mode in which a motion extent of said data is large,  
5 then said controller maps said data onto a first sub-field  
arrangement in which sub-fields are arranged to have a  
small contour noise at a moving picture; whereas, if said  
operation mode selected by the mode selector is an PC mode  
in which a motion extent of said data is small, then said  
10 controller maps said data onto a second sub-field  
arrangement in which sub-fields are arranged to have a  
wider gray level expression range than the first sub-field  
arrangement.

15 17. The driving apparatus as claimed in claim 11, wherein,  
if said operation mode selected by the mode selector is an  
PC mode in which a motion extent of said data is small,  
then said controller controls the number of sustaining  
pulses to be smaller than the number of sustaining pulses  
20 set in correspondence with an AV mode in which a motion  
extent of said data is large.

18. The driving apparatus as claimed in claim 17, wherein,  
if said operation mode selected by the mode selector is an  
25 PC mode in which a motion extent of said data is small,  
then said controller reduces the number of sustaining  
pulses such that said data can be displayed at an average  
brightness falling in 50% through 80% with respect to an  
average brightness of said data displayed on the plasma  
30 display panel in an AV mode in which a motion extent of  
said data is large.